

Legs monodactylous, strongly sclerotized.

Length: prodorsum 234 μ from rostrum to pseudostigmatic organ, hysterosoma from pseudostigmatic organ to posterior tip 510 μ , total length 744 μ ; width 454 μ .

A single specimen of this new genus and species was collected from New Found Gap, Great Smoky National Park, North Carolina, 10 July 1957, by S. and D. Mulaik. The type specimen will be deposited in the U.S. National Museum.

REFERENCES

- Balogh, J.** 1965. A synopsis of the World oribatid genera. *Acta Zoologica* 11(1/2):5-99.

THE GENUS NEPITIA WALKER

(LEPIDOPTERA: GEOMETRIDAE)

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ABSTRACT—The genus *Nepitia* Walker and its two included species are reviewed; *N. embra*, n. sp., is described from southern Brazil.

Nepitia Walker has usually been synonymized with *Pero* Herrich-Schaeffer (= *Azelina* Guenée), and although this genus is closely related to *Pero*, there are several major differences. The structure of the valve, the shape of the juxta, and the protuberance from the costa of the valve in the male genitalia, as well as the presence of two small signi in the bursa of the female genitalia, will separate *Nepitia* from *Pero*.

Nepitia Walker

Nepitia Walker, 1866, *Cat. Lep. Het. Brit. Mus.* 35:1565.

Type-species: *N. detractaria* Walker by monotypy.

Head: palpi upturned, but with the third segment small and porrect; antennae simple in both sexes. Wings: venation as in *Pero*, R1, R2, R3, simple, free; R4 and R5 stalked; wings elongate with the apex falcate and the tip truncate. Male genitalia: costa of the valve developed into a mushroom-like protuberance; valve as in *Pero*; juxta with two long arms, strap like, surrounding the aedeagus; gnathos small, but well developed. Female genitalia: ostium funnel shaped; ductus bursa heavily sclerotized, ridged internally; bursa with two small signi.

Two species belong to this genus, one of them described as new. Superficially they are difficult or impossible to distinguish, although they are probably completely allopatric. The greatest differences are in the female genitalia, with some slight differences between the male genitalia, particularly in the vesica of the aedeagus. One species,



Figs. 1 & 2. *Nepitia embra*, n. sp.: 1, male; 2, female.

detractaria, occurs from Southern Mexico through Central America into the Andes to Bolivia. The other, *embra*, n. sp., is limited to Southern Brazil.

***Nepitia embra*, n. sp.**

(Figs. 1, 2, 4-7)

Male.—(fig. 1) Head: third segment of palpi tipped with white. Thorax: brown with a purplish tendency; tibiae tipped with white. Forewing: brownish, more or less suffused with purplish-black depending on the specimen and its age (older specimens are usually lighter); finely striate with black lines; basal area almost dark violet, darker in middle along the inner margin; antemedial line black with a black shade extending along its projection into the cell to the discal dot; median area dark brown with a slight violet appearance, lighter brown along costa except along postmedial line; discal dot large, light brown, contrasting with a white curly line in it; postmedial line black, fine, followed by a thin dark violet band; subterminal area brown to violet-brown with the fine striate lines better developed than in remainder of wing; apex darker. Hindwing: brown suffused with purplish-black, anal angle lightest; postmedial line black, vague. Below: brown with a violet tinge; discal dots of fore and hindwings large, contrasting, cream-colored; a whitish blotch in lower half of subterminal area of forewing; inner margin of forewing lighter; postmedial line of hindwing black, vague, but with white dots where veins cross it. Abdomen: brown with a blackish suffusion; tip clothed with heavy black hairs. Male genitalia: uncus notched at tip and costal process less developed than in *N. detractaria*; vesica with a spiny diverticulum, lacking in *detractaria*. Last sternite and tergite of male, figs. 5 and 6.

Female.—(fig. 2) Wings broader than in male; markings similar, but wings without purplish-black suffusion. Female genitalia: (fig. 7) Sclerotization of ductus bursa not extending into bursa; ostium wider and shorter than in *N. detractaria*, giving it a square to slightly rectangular appearance.

Variation.—Wing color in the males varies from almost all brown to a very dark purple. Some females also tend to have a slight purplish suffusion.

Holotype.—Male, Hansa Humboldt, Santa Catharina, Brazil; in the U.S. National Museum.

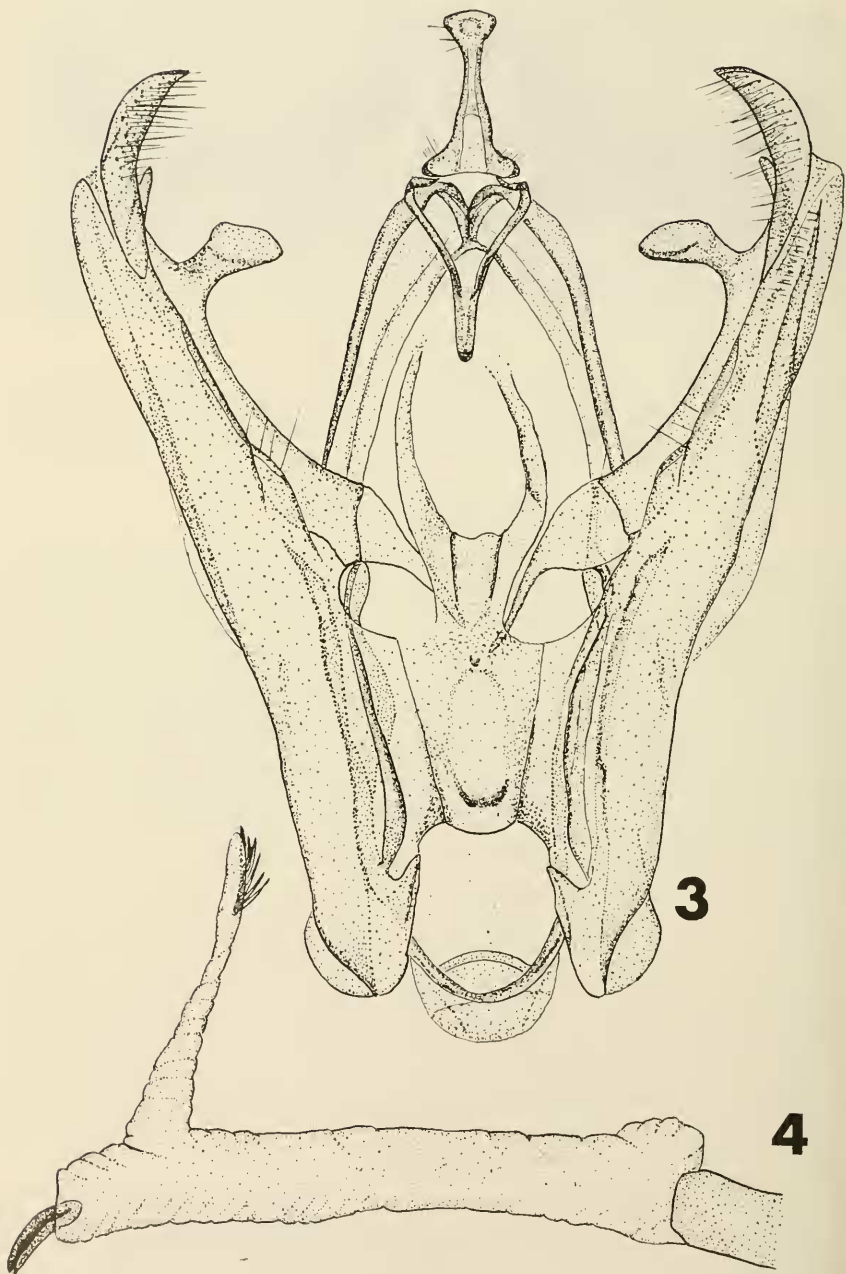


Fig. 3. *Nepitia detractaria* Walker: male genitalia. Fig. 4. *N. embra*, n. sp.: aedeagus.

Allotype.—Female, from the same locality as the type, also in the U.S. National Museum.

Paratypes.—Five males from the type locality in the U.S. National Museum; 2 females from Hansa Humboldt, 60m, Santa Catharina, Brazil in the British Museum (Natural History).

Specimens examined—BRAZIL.—*Paraná*: Castro, 950m, 9♂♂, 6♀♀; Castro, 1♂, 2♀♀; “Paraná,” 1♂; *São Paulo*: Alto da Serra, 7♂♂, 3♀♀; Alta da Serra, Santos, 1♂; Cantarcira, XII, 1♂; São Paulo, 2♂♂; Serra da Cubotas, VII-VIII, 2♂♂; *Santa Catharina*: Blumenau, VII, 1♂; Hansa Humboldt, 60m, 2♀♀; Hansa Humboldt, 6♂♂, 2♀♀; Iguassua, Paraná, I, 1♂; Jaragua do Sul, XII-II, 8♂♂, 3♀♀; Joinville, 1♂; Neuvo Teutonia, IV-V, 6♂♂, 5♀♀; Nova Bremen, 250m, IX, 1♂; Rio Laeiss, Blumenau, XII-I, 6♂♂; Rio Vermelho, 850m, IV, 5♂♂, 2♀♀; Rio Vermelho, IV-VII, 2♂♂, 2♀♀; “St. Catherines,” 4♀♀. *Not found*: Caraca, 1♀.

Discussion.—Very similar to the other species in *Nepitia*, but known only from Southern Brazil.

Nepitia detractaria Walker

(Figs. 3, 8)

Nepitia detractaria Walker, 1866. Cat. Lep. Het. Brit. Mus. 35:1565.

Azelina detractaria (Walker): Butler, 1881, Ann. Mag. Nat. Hist. 8:31.

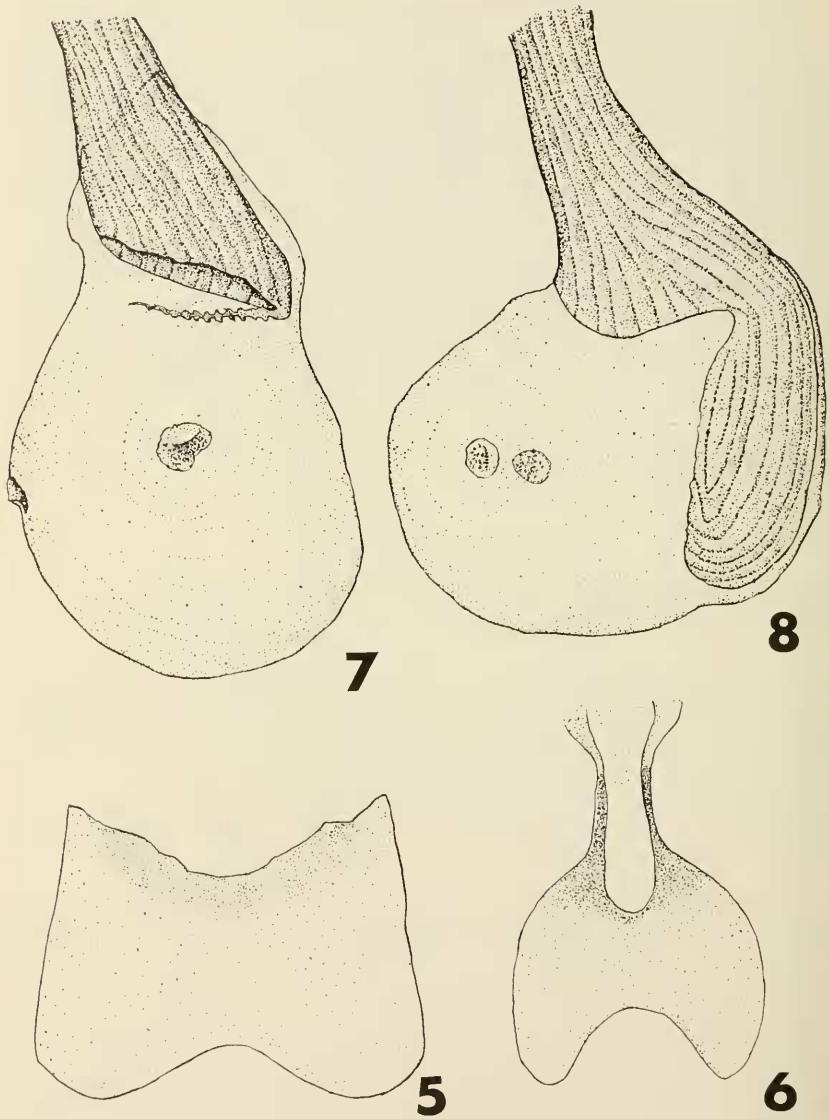
Male.—Almost identical with *N. embra*, but there is a slight tendency for the striation of fine black lines of the forewing above to be heavier, although this is only slightly so and not absolute. Male genitalia: (fig. 3) uncus only slightly, if at all, indented; costal process strongly developed; vesica of aedeagus with only two apical hooks, lacking diverticulum and patch of spines as in *embra*.

Female.—Identical with the female of *N. embra*. Female genitalia: (fig. 8) sclerotization of the ductus bursa extending into bursa; ostium long and funnel shaped.

Variation.—The intensity of the purplish-black suffusion is variable in this species also. Mexican specimens are more heavily striate than those from other localities.

Holotype described from a male from “Venezuela.” This specimen is in the British Museum (Natural History).

Specimens examined.—MEXICO—*Chiapas*: Liquidambar, 1100m, VIII, 1♂; *Oaxaca*: Puerto Elegio, Municipio Comaltepec, 2296 feet, IX, 5♂♂, 1♀; *Veracruz*: Jalapa, XII, 1♀; Misantla, XII, 1♂. COSTA RICA—*Cartago*: Juan Vinas, XI, V, 2♂♂, 1♀; Orosí, 1200m., 4♂♂, 1♀; Sitio, V-VI, 1♂, 2♀♀; Tuis, V-VI, 5♂♂, 1♀. VENEZUELA—*Aragua*: Rancho Grande (7km. N. Maracay), 1100m, VI-VII, 14♂♂, 1♀; *Mérida*: “Merida,” 1♀. COLOMBIA—*Boyacá*: Muzo, 400–800m, 1♂. ECUADOR—*Esmeraldas*: S. Javier, R. Cachabi (Cachavi), 60ft, 1♂; *Chimborazo*: Chimbo, 1000ft, VII, 1♂; *Imbabura*: Intaz (Intag),



Figs. 5-8. *Nepitia embra*, n. sp.: 5, last abdominal tergite; 6, last abdominal sternite; 7, bursa and ductus bursa. Fig. 8. *N. detractaria* Walker: bursa and ductus bursa.

1♂; Lita, 3000ft, 4♂♂; Paramba, 1050m, 21♂♂; Loja: Loja, 1♂; *Santiago-Zamora*: Palanda pres Loja, 1♂; Zamora, 4♂♂. PERU—*Amazonas*: Chachapoyas, 1♂; Huambo, 4♂♂; *Huánuco*: Pozuzo, 800–1000m, 3♂♂; *Junin*: Chanchamayo, 1000–1500ft, 8♂♂; Chanchamayo, 1000m, 1♂; Chanchamayo, 2000m, 1♂; La Merced, II, 4♂♂; *Pasco*: Huancabamba, Cerro de Pasco, 1♂; *Puno*: Agualani, 9000ft, X, 1♂; Chaquimayo, 2500–3000ft, 2♂♂; La Oroya, Rio Inambari, 3100ft, I, 1♀; La Union, R. Huacamayo, 2000ft, XI, 1♂; Santo Domingo, 6000ft, II, VI, X, 2♂♂, 2♀♀; Yahuar mayo, 1200ft, X-XI, 1♂; *Not located*: El Porvenir, 900m, 2♂♂; Jelepacio (Jepelacio, San Martin?), 1♂; Pumayaca, 1♂; Rio Colorado, 2500ft VII-IX, 1♂; San Gabon, 2500ft, III-IV, 1♂. BOLIVIA—*Cochabamba*: Incachaca, 3♂♂, 10♀♀; *La Paz*: Corvico (Coroico ?), 1800m, 2♂♂; Rio Songo, 750m, 4♂♂; Yungas de la Paz, 1000m, 2♂♂.

Discussion.—Distributed from Southern Mexico through Central America into the Andes. It is very difficult or impossible to separate superficially from *N. embra*, but the two species seem to be separate geographically.

REFERENCES

- Butler, A. G. 1881. Revision of the lepidopterous genus *Azelina*, with descriptions of new species in the collection of the British Museum. Ann. Mag. Nat. Hist. (Ser. 5) 8:29–46.
- Walker, F. 1866. List of the specimens of lepidopterous insects in the collection of the British Museum. Part 35, supplement 5, pp. 1535–2040.

**LECTOTYPE DESIGNATION FROM SEVEN SYNTYPES OF
TETRAPOLIPUS RHYNCHOPHORI EWING**
(ACARINA: PODOPOLIPIDAE)¹

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ABSTRACT—The designation of a lectotype for the species *Tetrapolipus rynchophori* Ewing has been made along with figures of the female lectotype and immature female paralectotypes.

The need for a designation of a lectotype for the species *Tetrapolipus rynchophori* Ewing became apparent when it was found that Ewing (1924, Proc. Ent. Soc. Wash. 26:66–69) did not designate a holotype for this species. The type material upon which Ewing based his new description has been studied by the author by the loan of the seven syntypes deposited in the United States National Museum. The type

¹ Approved by the Director of the South Dakota Agricultural Experiment Station as Journal Series No. 849.